SPECIFICATION AMENDMENTS

At page 1, after the title, insert the following heading:

FIELD OF THE INVENTION

At page 1, after paragraph **[0001]**, insert the following heading:

BACKGROUND OF THE INVENTION

Replace paragraph **[0002]** with:

[0002] ~~A number of textile machines, to~~ To produce textile goods, such as two-dimensional textile products by weaving or knitting, many textile machines require a plurality of yarn feeders, which feed yarns to various yarn-using stations. The task of the yarn feeder is to draw the yarn from a spool and furnish it to the knitting machine. So-called positive feed wheel units are known, which have a yarn feed wheel around which yarn wraps; the rotation of the yarn feed wheel determines the yarn feeding to the subsequent machine.

At page 2, after paragraph **[0007]**, insert the following heading:

BRIEF SUMMARY OF THE INVENTION

Replace paragraphs **[0008]**-**[0010]** with:

[0008] ~~With the above as the point of departure~~ In view of the foregoing, it is the object of the invention to create a method for feeding yarns to a textile machine, and create a corresponding yarn feeder system for feeding a plurality of yarns to yarn-using stations, with which a knitted article with a uniform loop size can be created.

[0009] This object is attained by the feeding method ~~of claim 1~~ and by the yarn feeder system of ~~claim 13 as follows:~~ the invention.

[0010] In the yarn feeding method of the invention, a plurality of yarn feeders are operated in tension-controlled fashion in one or more trial phases. In the process, the yarn feeders attempt to feed yarns at a specified yarn tension. Depending on the yarn consumption of each knitting station connected, the result is individual yarn feed quantities and yarn feed speeds to the various yarn feeders. These yarn feed quantities or yarn speeds are detected and are made the basis for determining a set-point value, that is, a specified speed or a specified yarn quantity. Once the trial phase has elapsed, the yarn feeders receive a signal that characterizes the specified speed or the specified yarn quantity and then furnish the appropriate yarn quantities. As a result, the same loop size is ~~compelled~~ ensured at all the

knitting stations connected to the yarn feeders. The yarn tensions adjust themselves variously at the various yarn ~~feeders~~.

Replace paragraph **[0013]** with the following:

[0013] This ~~kind of~~ procedure can apply to all yarn feeders of a knitting machine or other ~~kind~~ kinds of textile ~~machine~~ machines. In a preferred embodiment, however, the yarn feeders are combined into groups, and the aforementioned procedure is employed individually for each group. The yarn feeders combined into one group are preferably those which are intended to perform synchronous yarn feeding. If patterns are to be made which require one group of yarn feeders either to be temporarily out of action or to feeds at different yarn speeds than yarn feeders of a different group, this can be easily attained by supplying the yarn feeders with corresponding set-point speed signals. The individual yarn feeders of each group can execute a ~~genuinely~~ positive mode of operation and nevertheless attain intermittent yarn feeding actions. To that end, they can for instance be supplied with a repeat signal and/or a needle signal and thus be synchronized with the knitting machine or other textile machine. Appropriate control signals can be generated by reading out and processing pattern data from a pattern memory.

Replace paragraphs **[0017]-[0019]** with the following:

[0017] It can suffice if the yarn speed to be ascertained during the trial phase is ascertained at only some yarn feeders in one group of yarn feeders. This is true particularly with relatively large groups and in cases in which only slight deviations in the feeding speed occur within one group of yarn feeders. However, it is considered advantageous, for the specified speed, to evaluate the yarn speeds of all the yarn feeders of one group of yarn feeders. The evaluation can be done in the form of an averaging operation~~;~~. ~~the~~ The average value may be either an arithmetic mean value or a geometric mean value or a mean value formed by other rules. For instance, yarn speeds of individual yarn feeders may also be disproportionately higher-weighted or lower-weighted, if they deviate too greatly from the average for the rest of the group.

[0018] It is also possible to perform the averaging operation multiple times by different methods. For instance, there can be a first trial run, in which the specified yarn speed has been formed as a geometric average of the individual yarn speeds. If in a subsequent yarn speed-controlled trial mode the resultant yarn tensions are ~~then~~ unsatisfactory, or in other words are too far apart, then the specified yarn speeds can be recalculated again in a second process, in which arithmetic averaging is for instance attempted, and it is checked in a new

trial mode whether yarn tensions that are now close together are attained. If not, then for instance still another mean value can be formed, for instance as a square mean value for the yarn speed, and with it a new trial mode is then performed. It is furthermore possible to adapt the weighting factors adaptively in the averaging operation. To avoid excessively high yarn tensions, the feeding speeds, ascertained in the trial mode, of those yarn feeders that exhibit especially high yarn feeding speeds can then be disproportionately higher-weighted. If in the trial mode, with a specified yarn quantity or yarn speed, an excessively high or low yarn tension is found at individual knitting stations, then the weighting factors for the yarn speeds can be adapted in the averaging operation. For instance, high yarn speeds can be disproportionately lower-weighted, if excessively low yarn tensions have occurred in the speed- controlled operating mode. Conversely, the weighting factors of especially high feeding speeds ascertained in the tension- controlled mode can be increased, if in the ensuing speed-controlled trial mode excessively high tension peaks have occurred.

[0019] In ~~the cases named~~ one embodiment, the trial phase proceeds in two stages. In a first stage, the yarn feeders are operated with tension control, and the yarn speeds are recorded. After suitable averaging to ascertain a specified value for the yarn speed, what follows in a second stage is a trial mode at a specified yarn speed, to check the resultant yarn tensions.

Replace paragraph **[0024]**with the following:

[0024] ~~In the drawing, exemplary~~ Exemplary embodiments of the invention are illustrated in the drawings, of which~~. Shown are~~:

After paragraph **[0024]** insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

Replace paragraphs **[0025]-[0029]** with the following:

[0025] Fig. 1~~,~~ is a schematic illustration of a textile machine with centrally controlled yarn feeders;

[0026] Fig. 2~~,~~ is a schematic block circuit diagram of a yarn feeder in the system of Fig. 1;

[0027] Fig. 3~~,~~ is a block circuit diagram of a modified embodiment of a yarn feeder;

[0028] Fig. 4~~,~~ is a block circuit diagram of the central unit of the system of Fig. 1; and

[0029] Fig. 5~~,~~ *is* a flow chart to explain the function of the yarn feeder system of the invention.

After paragraph **[0029]**, insert the following heading:

DETAILED DESCRIPTION OF THE INVENTION

Replace paragraph **[0031]** with the following:

[0031] Fig. 2 schematically shows the structure of the yarn feeder 11, as an example for the all the other yarn feeders 12, 13, 14, 17, 18, 19. Thus the following description applies accordingly to all the yarn feeders~~:~~.

Replace paragraph **[0038]-[0039]** with the following:

[0038] An input device 53 is connected to the communications block 48 and serves to switch the yarn feeder system 1 from the trial mode of operation to regular operation and to perform other input tasks. More details ~~can be learned from the ensuing~~ are provided in the following functional description~~:~~.

[0039] The yarn feeder system 1 is a positive yarn feeder system which also has a trial mode of operation. For performing the trial mode, the input device is actuated in such a way that the central unit 31 sends a trial mode signal to the yarn feeders 11, 12, 13, 14 of group 8 and/or to the yarn feeders 17, 18, 19 of group 16. Thus the switch blocks 41 of the particular yarn feeders, belonging to the group 8 or 16 that is addressed, switch over to the lower position shown in Fig. 2, in which the yarn tension regulators 38 are activated. Next, the central unit 31 sends a set-point yarn tension signal, which is supplied to the yarn tension regulator 38 by the respective control unit 43. In the ensuing trial mode, the yarn tension regulator regulates the tension at each yarn feeder to the desired yarn tension. The result at the various yarn feeders 11, 12, 13, 14 on the one hand and 17, 18, 19, on the other, ~~is~~ may have different yarn feeding speeds (or yarn feeding quantities per machine revolution), as a consequence of the different yarn consumption of the various knitting stations connected. These yarn speeds are detected and sent on to the control unit 43 via the line branch 46. This control unit sends the yarn feeding speeds to the central unit. This can be done periodically, continuously, at the end of the trial mode, or alternatively by the request of the central unit 31. ~~No later than once~~ Once a trial mode has been performed, the yarn speeds and yarn feeding quantities of all the yarn feeders 11, 12, 13, 14, 17, 18, 19 are present in this central unit. The yarn feeding quantities of each group 8, 16 are now averaged for individual groups by the mean value former 49 and stored in memory.

Replace paragraph **[0042]** with the following:

[0042] In an alternative embodiment, the reception block 52 in Fig. 4 has an alternative task~~:~~. It does not calculate new specified yarn speed values on the basis of the machine rpm constantly, but instead does this only once, at the end of the trial mode. After that, this speed is sent as a coefficient to the yarn feeders 11, 12, 13, 14, 17, 18, 19 and stored in memory there. The yarn feeders after that receive signals which characterize the respective current machine speed. The conversion of the yarn feeding speed in the trial mode to the current machine speed is then done in the control units 43.

Replace paragraph **[0046]** with the following:

[0046] ~~A~~ In summary, a yarn feeder system 1 includes a plurality of yarn feeders 11, 12, 13, 14, which are combined into one group 8. In the trial mode, the yarn feeders 11, 12, 13, 14 operate in an individually tension-controlled manner on the basis of a specified yarn tension value. The yarn feed quantities or yarn speeds that result from this at the various yarn feeders 11, 12, 13, 14 are reported to a central unit. From the reported yarn speeds, the central unit calculates a group average and sends this to the yarn feeders 11, 12, 13, 14 as a specified value for subsequent operation. As a result, after that, the individual yarn feeders 11, 12, 13, 14 can operate in the purely positive mode. Moreover, the central unit 31, via an input 57, can receive both signals that characterize the machine speed (rpm) and pattern signals, on the basis of which the yarn feeders of the particular group 8 or 16 that is to respond at that time are switched on and off or speeded up or slowed down.